



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10:056,352	01/24/2002	Gregory Mathus	5043CON	8045
7590 12/30/2003 Samuels, Gauthier & Stevens, LLP 225 Franklin Street, Suite 3300 Boston, MA 02110			EXAMINER KOYAMA, KUMIKO C	
			ART UNIT 2876	PAPER NUMBER

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,352

Applicant(s)

MATHUS ET AL.

Examiner

Kumiko C. Koyama

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Acknowledgement is made of receipt of Amendment filed on September 08, 2003.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wijnschenk et al (US 6,270,728) in view of Moh et al (US 6,165,594).

Wijnschenk shows a test tube (FIG 1) comprising an enclosed sidewall 2 and an integral bottom surface 6 that together define a tubular container 1 having an open top 20, wherein the bottom surface has a concave interior surface 3 and a planar exterior surface 7 upon which machine readable coding 9 is encoded on a label, having a light-coloured background on which a contrasting pattern of dots (col 1 lines 59-65) is printed, deposited onto the planar exterior surface 7 to uniquely identify the test tube (col 1 lines 20-22). Wijnschenk also teaches that the machine readable coding is applied to an optically opaque background to ensure the machine readable coding is readable at all times with an optical reading mechanism (col 1 lines 66+).

Re claims 22, and 29: Wijnschenk fails to teach that the machine readable coding is encoded within a multi-layered opaque coatings of contrasting colors.

Art Unit: 2876

Moh teaches a machine readable label (col 1 lines 19-23) having a multilayered construction (col 3 lines 16-17), where a top layer of one color overlies a layer of a contrasting color (col 2 lines 58-59). Moh discloses that the label is attached to identify and track a product (col 2 lines 67+) made out of a substrate 12, which includes glass (col 5 lines 43-44).

Re claims 23, 25, 27 and 30: Moh shows a label 10, which includes base layer 14 and top layer 16, attached to a substrate 12 (FIG 1, col 5 lines 32-33). Moh teaches a formation of a code pattern by removing portions of the top layer 16 to expose the underlying base layer 14, so that the code is optically discernible (col 7 lines 12-20). Moh also teaches that layer 14 and layer 16 are contrasting colors (col 7 lines 13-15), and that layer 14 is white and layer 16 is black (col 7 lines 26-27).

Re claim 24, 26 and 32: Moh teaches that selected portions of the second layer are removed by exposure to laser ablating techniques (col 8 lines 9-15).

Re claim 28: Moh teaches that the label may comprise metal (col 2 lines 4-12).

Re claim 31: Moh teaches that the label may comprise metal (col 2 lines 4-12). Although Moh does not disclose the exact word "hot stamping," he discloses that for forming a multilayer label, layers may be stacked and laminated together using appropriate pressure and temperature (col 16 lines 1-2).

In view of Moh's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate Moh's label to the teachings of Wijnschenk and create a multilayered opaque coatings of contrasting colors because it would have resulted in more distinct color contrast of the coding and distinctive opaqueness of the background, therefore resulting in reducing the error rate in reading the code.

Art Unit: 2876

3. Claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wijnschenk as modified by Moh as applied to claim 24 and 32 above, and further in view of Mizobuchi et al (US 6,133,342). Wijnschenk as modified by Moh have been discussed above.

Wijnschenk as modified by Moh fail to teach that the opaque coating undergoes a change in color when exposed to the coherent light source, includes a light sensitive pigment that undergoes the change in color, and the change in color is effected by altering the color of the light sensitive pigment included in the opaque coating.

Mizobuchi discloses an opaque coating composition comprising a colorant (col 2 lines 57-60) and a substrate is coated with the composition (col 2 lines 45-46). Mizobuchi further discloses that upon irradiating the substrate with a laser beam according to the predetermined marking pattern, the polymeric material becomes translucent or transparent, and as a result, the colorant is made visible. The visible mark is created on the substrate (col 2 lines 47-53). The colorant comprises a pigment and may be in different colors, such as blue, red, or yellow (col 10 lines 1-2 and 44-45, col 12 line 9).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Mizobuchi to the teachings of Wijnschenk as modified by Moh because the modification provides the code marking with more variety of colors, which is easily visible and recognizable by human eye. Such modification also helps place the test tube in a correct category or location by using the color differences in order to prevent the test tube from getting lost within a lab.

Response to Arguments

4. Appellant's arguments filed September 08, 2003 have been fully considered but they are not persuasive.

In response to Appellant's arguments regarding "neither Wijnschenk et al or Moh et al...disclose or suggest the unitary test tube concept claimed in claim 22, where the machine readable data is encoded within an opaque coating on the exterior bottom surface of the test tube," the examiner respectfully disagrees. The Appellant emphasizes "machine readable data encoded on a separate carrier part 6 attached to a test tube bottom...label that is attachable to a substrate." However, the instant claim recites, "machine readable data is encoded within an opaque coating deposited onto said exterior surface," which includes attachable labels and separate carrier part attach to a test tube bottom. Taken the broadest interpretation of the claim, the phrase "deposited" includes, but not limited to, the meaning "attached." Unless the claim is limited to non-attachable labels, the examiner remains her position and believes that the references still read on the claims.

In response to Appellant's arguments regarding the "unitary construction" limitation of the test tube, the examiner has submitted in the prior Office Actions that the examiner believes that U.S. Patent Application No. 09/399,405, now known as U.S. Patent No. 6,372,293 (herein after '293 Patent) was allowed because the claim specifically defines the test tube in further detail using more limitations than the instant application. For example, claim 21 of the '293 Patent, which the examiner believes is the broadest claim in the patent, recites further limitation to define the unitary construction of the test tube, such as "...a concave interior surface and a planar exterior surface...an opaque coating of contrasting colors deposited onto said planar

Art Unit: 2876

exterior surface...” Such limitations are believed to be taking part of the claim to define the “unitary construction” of the test tube and were considered during prosecution of the application, especially during consideration for allowance. As stated in previous Office Actions, although the same language “unitary construction” is used, the definition of “unitary construction” in claim 22 of the instant claimed invention differs from that of ‘293 Patent due to the fact that these specific limitations or further new limitations were not included. Without such limitations, Wijnschenk and Moh references read on the instant claimed invention, and therefore, the examiner maintains her rejection. Claim 29 has been rejected on the same basis as discussed above.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kumiko C. Koyama whose telephone number is 703-305-5425

Art Unit: 2876

(or 571-272-2394 starting Jan. 15, 2003). The examiner can normally be reached on Monday-Friday 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Kumiko C. Koyama
Kumiko C. Koyama
December 22, 2003

Diane I. Lee
DIANE I. LEE
PRIMARY EXAMINER